Practice: 585 - Stripcropping

Scenario: #1 - Stripcropping - water erosion

# **Scenario Description:**

This scenario describes the implementation of a stripcropping system that is designed specifically for the control of water erosion or minimizing the transport of sediments or other water borne contaminants originating from runoff on cropland. The planned stripcropping system will meet the current 585 standard. Implementation will result in alternating strips of erosion susceptible crops with erosion resistant crops that are oriented as close to perpendicular to water flows as possible. The designed system will reduce erosion/sediment/contaminants to desired objectives. Payment for implementation is to defray the costs of designing the system, installing the strips on the landscape appropriately, and integrating a crop rotation that includes water erosion resistant species.

## **Before Situation:**

In this geographic area, excessive water erosion is caused by raising crops in a manner that allows water flows to travel unimpeded down the slope due to lack of residue or other conservation measures causing sheet and rill erosion or concentrated flow conditions, degradation of soil health through loss of topsoil and organic matter, along with offsite negative impacts to water quality and aquatic wildlife habitat.

#### **After Situation:**

A stripcropping system that includes at least two or more strips within the planning slope will be designed to include parallel strips of approximately equal widths of water erosion resistant crop species with non-water erosion resistant crop species. Widths will be determined using current water erosion prediction technology to meet objectives. The design and implementation of a stripcropping system will minimize sheet and rill erosion, protect soil quality, reduce offsite sedimentation, and benefit offsite aquatic wildlife habitat. Erosion prediction before and after practice application will be recorded showing the design and benefits of the practice. Erosion -resistant strips in rotation must be managed to maintain the planned vegetative cover and surface roughness.

**Scenario Feature Measure:** area of strips

Scenario Unit: Acre

Scenario Typical Size: 80

Scenario Cost: \$354.34 Scenario Cost/Unit: \$4.43

Cost Details (by category): Price **Component Name Component Description** Unit **Quantity Cost** (\$/unit) Equipment/Installation Truck, Pickup 939 Equipment and power unit costs. Labor not included. Hour \$36.60 3 \$109.80 Labor General Labor 3 231 Labor performed using basic tools such as power tool, Hour \$18.70 \$56.10 shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc. Specialist Labor 235 Labor requiring a specialized skill set: Includes Hour \$94.22 \$188.44 Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.

Practice: 585 - Stripcropping

Scenario: #2 - Stripcropping - wind erosion

# **Scenario Description:**

This scenario describes the implementation of a stripcropping system that is designed specifically for the control of wind erosion or minimizing the transport of airborne particulate matter originating from cropland. The planned stripcropping system will meet the current 585 standard. Implementation will result in alternating strips of erosion susceptible crops crop vegetation with erosion resistant crops or crop vegetation that are oriented as close to perpendicular to the critical wind erosion direction as possible. The designed system will reduce erosion/particulate matter emissions to desired objectives. Payment for implementation is to defray the costs of designing the system, installing the strips on the landscape appropriately, and integrating a crop rotation that includes wind erosion resistant species and vegetation.

## **Before Situation:**

In this geographic area, excessive wind erosion is caused by raising crops in a manner that allows wind velocities to travel unimpeded down the length of a field due to lack of growing green vegetation, crop residue, or other conservation measures causing wind erosion, airborne particulate matter emissions, degradation of soil health through loss of topsoil and organic matter, and offsite negative impacts to air quality.

#### **After Situation:**

A stripcropping system that includes at least two or more strips within the fields(s) will be designed to include parallel strips of approximately equal widths of wind erosion resistant crop species with non-wind erosion resistant crop species. Widths of strips will be determined using current wind erosion prediction technology to meet planned objectives. The design and implementation of a stripcropping system will minimize wind erosion, protect soil quality, reduce offsite deposition, and benefit air quality by reducing airborne particulate matter emissions. Erosion prediction before and after practice application will be recorded showing the design and benefits of the practice. Erosion -resistant strips or vegetation in rotation must be managed to maintain the planned vegetative cover and surface roughness.

**Scenario Feature Measure:** area of strips

Scenario Unit: Acre

Scenario Typical Size: 80

Scenario Cost: \$149.52 Scenario Cost/Unit: \$1.87

Cost Details (by category): Price **Component Name** Unit **Quantity Cost Component Description** (\$/unit) Equipment/Installation Truck, Pickup 939 Equipment and power unit costs. Labor not included. Hour \$36.60 1 \$36.60 Labor General Labor 231 Labor performed using basic tools such as power tool, Hour \$18.70 1 \$18.70 shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc. 235 Labor requiring a specialized skill set: Includes \$94.22 1 \$94.22 Specialist Labor Hour Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.